

CLAIMS

What is claimed is:

- 5 1. A method for prophylaxis or treatment of an inflammatory condition, said method comprising the steps of:
providing a patient having an inflammatory condition; and
administering to said patient a therapeutically effective amount of a composition comprising an NAD-related compound in a
10 form that is accessible to a receptor molecule, conveyed in a pharmaceutically acceptable carrier vehicle, wherein said composition reduces the degree of said inflammatory condition in said patient.
- 15 2. The method of claim 1, wherein said inflammatory condition is selected from the group consisting of intestinal epithelial inflammation, endotoxemia, sepsis, hemorrhagic shock and pancreatitis.
- 20 3. The method of claim 2, wherein said intestinal epithelial inflammation is Crohn's disease or ulcerative colitis.
4. The method of claim 1, wherein said composition is administered to said patient enterally.
- 25 5. The method of claim 4, wherein said composition is administered using an enteric-coated formulation.
6. The method of claim 1, wherein said composition is
30 administered to said patient systemically.

7. The method of claim 1, wherein said NAD-related compound is nicotinamide adenine dinucleotide (NAD⁺) or cyclic adenosine diphosphate ribose (cADPR).

5 8. The method of claim 1, wherein said NAD-related compound is selected from the group consisting of phosphorothioate analogues, N3'→P5' phosphoroamidate analogues and analogues with conformationally locked sugar rings.

10 9. A method for testing the effectiveness of a candidate compound for prophylaxis or treatment of an inflammatory condition, said method comprising the steps of:

providing said candidate compound; and

15 testing said candidate compound for an ability to inhibit nitric oxide (NO[•]) production in an ex vivo inflammation model.

10. A method for testing the effectiveness of a candidate compound for prophylaxis or treatment of an inflammatory condition, said method comprising the steps of:

20 providing said candidate compound; and

testing said candidate compound for an ability to inhibit hyperpermeability in an ex vivo inflammation model.

11. An article of manufacture comprising packaging material and
25 a therapeutic composition contained within said packaging material, wherein the therapeutic composition is therapeutically effective for prophylaxis or treatment of an inflammatory condition, and wherein the packaging material comprises a label that indicates that the therapeutic composition can be used for
30 prophylaxis or treatment of an inflammatory condition, and

wherein said therapeutic composition comprises an NAD-related compound, in a form that is accessible to a receptor

molecule, conveyed in a pharmaceutically acceptable carrier vehicle.

12. The method of claim 11, wherein said NAD-related compound is
5 nicotinamide adenine dinucleotide (NAD⁺) or cyclic adenosine diphosphate ribose (cADPR).

13. The method of claim 11, wherein said NAD-related compound is
selected from the group consisting of phosphorothioate analogues,
10 N3'→P5' phosphoroamidate analogues and analogues with conformationally locked sugar rings.

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